2004 Advisory Committee on Nanotechnology
Final Report Talking Points

I. Membership

- Co-Chaired by Delegate Purkey, Delegate Cosgrove, and Senator Wampler.
- Composed of 25 citizen members from the public and private sectors who possess a wide variety of experiences and knowledge. Committee members include representatives and department heads from Virginia's major research institutions, industry leaders, and government representatives.
- Met 3 times: August 4, September 22, October 20.
- The Advisory Committee on Nanotechnology was charged, pursuant to House Joint Resolution 120 (2004), to identify nanotechnology research and economic development opportunities for the Commonwealth and to consider the efficacy of creating a statewide, comprehensive and coordinated strategy to secure additional federal research and development funds and to boost commercial activity in this fast growing sector.

II. Meetings

- Received an overview of nanotechnology from Dr. Robert Hull, Director of the NanoQuest Institute and Professor of Engineering, UVA.
  - ✓ Nanotechnology involves the ability to engineer systems with components on length scales of one to 100 nanometer (1 nanometer = a billionth of a meter).
  - ✓ Nanotechnology has the potential to make a major impact on the economy in the fields of electronics and optics, healthcare, the environment, energy, microspace, bio-threat detection, transportation, and national security.
  - ✓ The federal government has enacted the 21st Century Nanotechnology Development Act, authorizing almost $3.7 billion in government funding for research and development.
  - ✓ In Virginia, opportunities exist for partnerships in research, manufacturing, and education.
- Briefed by the Center for Innovative Technology about the approaches of other states in promoting nanotechnology development and what Virginia can do to achieve nanotechnology leadership.
  - ✓ Virginia has extensive nanotechnology capabilities, including its research institutions. It must focus on the cost-effective manufacture of nanomaterials, and build a foundation of collaborative research.
  - ✓ Virginia currently ranks 21st in the number of nanotechnology companies in the states. Other states have invested heavily in nanotechnology.
- Learned about the proposed Nanotechnology Accelerated Development Center in Northern Virginia that could help to bridge the gap between basic research and the commercial market.

- Briefed by Dr. James Kadtke, Senator John Warner's Science Advisor, about federal nanotechnology initiatives, which lead to a broader discussion about the importance of promoting technical and academic education in this area.

III. Recommendations

- No formal legislative recommendations - although a variety of ideas were discussed.
- Key areas of focus include:
  - ✓ Commercialization (bridging the gap between research and commercialization)
  - ✓ Education
  - ✓ Financing, including business development and incentives.
- A more permanent body should be established to continue discussions about nanotechnology in the Commonwealth.
- Other possibilities involved amending existing statutes to treat nanotechnology like biotechnology, through the use of funding mechanisms and special tax-status legislation.